



PRIMENA NAJNOVIJIH TEHNOLOGIJA U REŠAVANJU TRETMANA OTPADNIH VODA U OKVIRU TERMoeLEKTRANE U SRBIJI - PRIMER TE KOSTOLAC B

APPLICATION OF LATEST TECHNOLOGIES TO THE SOLUTION FOR WASTEWATER TREATMENT WITHIN THERMAL POWER PLANT IN SERBIA - ON EXAMPLE OF TPP "KOSTOLAC B"

REZIME

Za odvijanje procesa proizvodnje električne energije iz uglja jedan od osnovnih uslova je obezbeđenje dovoljne količine vode, koja se u termoelektrani koristi kao radni i tehnološki fluid u različitim vidovima i za različite potrebe. Usled korišćenja vode za predmetne potrebe dolazi do njenog zagađenja. Sistem za prečišćavanje otpadnih voda u TE Kostolac B predstavlja složeni sistem koji će obuhvatiti određeni broj međusobno povezanih postrojenja i jedinica. Ključna karakteristika budućeg sistema jeste njegova decentralizovana struktura. Izabrani pristup se zasniva na preporuci tretmana otpadnog tečnog toka na izvoru nastanka u većem broju manjih jedinica uz izbegavanje izgradnje velikih centralnih jedinica sa velikim hidrauličkim opterećenjem. Ocenjuje se da je izabrani pristup u skladu sa najboljim dostupnim tehnikama u ovoj oblasti.

Ključne reči: TE Kostolac B, prečišćavanje otpadnih voda, životna sredina

ABSTRACT

For the process of electricity production from coal is one of the main requirements is to provide a sufficient quantity of water, which is in a thermal power plant is used as the working and technical fluid in various forms and for different purposes. Due to the use of water for the needs of the subject comes up of its pollution. System for wastewater treatment in TPP B Kostolac is a complex system that will include a number of interrelated plants and units. A key feature of the future system is its decentralized structure. The chosen approach is based on the recommendation of treatment of waste liquid flow at the source in a number of smaller units, avoiding the construction of great central unit with a large hydraulic load. It is estimated that the chosen approach is consistent with best available techniques in this field.

Key words: TPP B Kostolac, waste water treatment, environment.

UVOD

Usvajanjem više zakona i podzakonskih akata iz oblasti zaštite životne sredine u prethodnim godinama, kao i Zakona o ratifikaciji ugovora o stvaranju energetske zajednice jugoistočne Evrope, Zakona o vodama, obaveza JP Elektroprivrede Srbije je da uskladi rad termoelektrani sa aspekta smanjenja emisije štetnih materija u vode.

S tim u vezi se i pristupilo izradi tehničke dokumentacije Postrojenja za prečišćavanje otpadnih voda termoelektrane "Kostolac B", Studija opravdanosti sa idejnim projektom.

PD TERMoeLEKTRANE I KOPOVI KOSTOLAC

PD Termoelektrane i kopovi Kostolac u Kostolcu, po-

INTRODUCTION

By adopting several Laws and Sublegal Enactments in the field of environmental protection during the previous years, as well as the Law on Ratification of the Treaty Establishing Energy Community of South East Europe and the Water Law, the Public Enterprise Electric Power Industry of Serbia has become obliged to harmonize operation of thermal power plants, from the aspect of reduction of pollutants emission into water.

With regard to this issue, preparation of the technical documentation – Feasibility Study and Preliminary Design for the Wastewater Treatment Plant at Thermal Power Plant "Kostolac B", has commenced.

CE THERMAL POWER PLANTS AND OPEN PIT MINES "KOSTOLAC"

CE Thermal Power Plants and Open Pit Mines "Kosto-

Irena Gavrić, dipl.inž.; mr Dušan Krstić, dipl.inž.; Milena Tomašević, dipl.inž., Energoprojekt – Hidroinženjering a.d., Bulevar Mihaila Pupina 12, 11070 Novi Beograd, www.ephydro.com, info@ephydro.com

Irena Gavrić, B.Sc.Eng.; Dušan Krstić, M.Sc.Eng.; Milena Tomašević, B.Sc.Eng., Energoprojekt – Hidroinženjering Joint Stock Company, Bulevar Mihaila Pupina 12, 11070 Novi Beograd, www.ephydro.com, info@ephydro.com